MASS. LRW1.2: V88



# **DRAFT**

(For Public Comment April 28 -- July 31, 1995)

# Volunteer Sites Program Plan



The Commonwealth of Massachusetts Low-Level Radioactive Waste Management Board 100 Cambridge Street, Room 903 Boston, MA 02202

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# PUBLIC MEETING SCHEDULE FOR DRAFT DOCUMENTS

Date (all 1995)	Time	Type of Meeting	Address (all Massachusetts)
May 10	7 - 10 p.m.	Briefing Session	Lasell College, Wolfe Hall 1844 Commonwealth Ave. 3rd Floor, Room 302-303 Newton
May 24	7 - 10 p.m.	Briefing Session	Berkshire Community College South County Campus Facility 343 Main Street, Room S-1 Great Barrington
June 13	7 - 10 p.m.	Public Hearing	Auditorium Adams Memorial Middle School 30 Columbia Street Adams
June 14	7 - 10 p.m.	Public Hearing	Aldermanic Chambers Chicopee City Hall, 4th Floor Chicopee
June 15	7 - 10 p.m.	Public Hearing	Fellowship Hall First Church Unitarian Universalist 15 West Street Leominster
June 28	7 - 10 p.m.	Briefing Session	Cafeteria Bridgewater-Raynham Reg. H.S. Comer of Center and Mt. Prospect Sts. Bridgewater



# **Draft Volunteer Sites Program Plan**

April 28, 1995

#### 1. Introduction

The Low-Level Radioactive Waste Management Board has begun the process of initiating the siting of a low-level radioactive waste (LLRW) disposal facility in Massachusetts for LLRW produced as a by-product of various operations and services by about 85 radioactive materials licensees in the Commonwealth. The action to identify a facility site is a result of the lack of disposal capacity available to these generators. No out-of-state facility is available to handle all of Massachusetts' LLRW; consequently, the 85 Massachusetts generators must store their LLRW on site until a facility is operational, expected to occur after the year 2000.<sup>2</sup>

One of the initial phases of the siting process is the development of a Volunteer Sites Program. The Volunteer Sites Program will give potential site communities greater opportunities to participate In, and control the outcome of, the site selection process.

Four basic conditions for a program encouraging volunteered sites are identified in the <u>Low-Levei</u> Radioactive Waste Management Pian.<sup>3</sup> These include:

- (1) Notifying ail municipalities about the development of a Volunteer Sites Program.
- (2) Encouraging volunteered sites <u>after</u> completion of the Statewide Mapping and Screening stage of technical site screening, and <u>after</u> the issuance for public review and comment of the <u>Statewide Mapping and Screening Report</u>.
- (3) Using the same Department of Environmental Protection (DEP) environmental siting criteria regulations to evaluate volunteered sites as will be used to evaluate sites identified through the technical screening process.
- (4) Providing communities where a potential volunteer site is located funds to assess various advantages and disadvantages of an LLRW facility.

State law expressly prohibits the disposal of LLRW by "shallow land burial" in landfills or "dumps." [M.G.L. c.111H (Chapter 111H), s. 16(a)] The Act also requires that any LLRW disposal facility <u>must</u> permit waste to be <u>monitored</u> continuously, and <u>retrieved</u>, if necessary, for corrective action. In addition, the Act also requires that the institutional control period (i.e., the time of post-closure facility monitoring and malntenance) "shall not be less than the minimum time required for any LLRW present at the site to decay to the maximum concentrations above natural background levels permitted to be released into air or water in unrestricted areas under federal and state law." [Section 46(b)] These "monitoring," "retrieval," and institutional control "duration" conditions are all intended to ensure that state government never "walks away" from an LLRW disposal site, unless the site is free from radioactive contamination. Therefore, a Massachusetts LLRW "disposal" facility is analogous to very, very, long-term "storage."

<sup>&</sup>lt;sup>2</sup> The Management Board continues to hold discussions with other states regarding possible out-of-state disposal solutions. If such disposal is arranged out of state for all Massachusetts LLRW, then the Board will reconsider its vote to site an in-state facility. At this juncture, efforts to negotiate such an out-of-state remedy have been unsuccessful.

<sup>&</sup>lt;sup>3</sup> The Management Board adopted this plan in December, 1993.

The Volunteer Sites Program will begin after public meetings are conducted on the <u>Statewide Mapping and Screening Report</u>, and will continue for up to two years. After the formal period in which the Board will encourage volunteers, it will return to the remaining stages of technical screening required by Chapter 111H, namely Possible Locations and Candidate Site Identification.

While voluntary siting processes have been effective in other states and Canada, the success of this Massachusetts program will be determined by the quality of sites that may be volunteered, the support of local citizens for volunteered sites and Volunteer Site Agreements,<sup>5</sup> the consideration of volunteered sites as Candidate Sites to undergo detailed site characterization, and the potential for selection of a volunteered site as a Superior Site.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> Depending upon the success of the program, the Management Board may reduce this time period, or extend it to encourage volunteers.

<sup>&</sup>lt;sup>5</sup> A "Volunteer Site Agreement" is the contract entered into by the Management Board and the volunteer site community which has been approved by a community-wide referendum and sets forth the obligations and privileges of the community and the Board, including compensation and impact payments to be provided to the site community.

<sup>&</sup>lt;sup>6</sup> A "Candidate Site" is a potential facility location which will undergo year-long environmental analysis, called "detalled site characterization," as part of the process to select any superior site. A "Superior Site" is any site selected by the Management Board for a facility, following the technical screening steps required by Chapter 111H.

# 2. Program Objectives

The major objectives of the Management Board's volunteer program are to:

 Enable communities to <u>explore</u> the possibility of volunteering a site <u>without committing</u> to site a facility.

Any request for information, or participation as a "potential" volunteer site community, is completely voluntary and will not imply an obligation to volunteer a facility site.

 Enable municipalities to evaluate various impacts of an LLRW facility <u>prior</u> to any final site selection.

Grants will be available to municipalities to allow independent assessments of the "pluses" and "minuses" of hosting a facility. (Comprehensive environmental reviews will occur later In the process.)

A "potential" volunteer site community will be able to evaluate the unconditional guarantee of compensation offered by the Management Board to each volunteer site community over and above the compensation provided by state law. A "potential" volunteer site community also will be able to consider additional compensation and impact payments that may be negotiated in such an agreement.

 Identify a suitable site for an LLRW disposal facility that meets all environmental and other siting criteria mandated by state regulations.

Any "Superior Site" chosen as an LLRW disposal facility must conform to the environmental siting criteria in DEP regulations 310 CMR 43.00, which protect public health, safety, and the environment, as well as other state and federal requirements for licensure. A "volunteer site" will not be selected by the Management Board simply because of local support; it must meet the requirements in DEP site selection regulations.

• Give the municipality the decision-making authority over its choice as a volunteered site.

A community can withdraw from the Volunteer Sites Program at any time prior to a local referendum vote affirming the site and the Volunteer Site Agreement.<sup>8</sup>

• Provide a mechanism for local approval of a volunteered site.

The Volunteer Sites Program is designed to reduce the strife inherent in siting activities. It provides a process for citizens and government to solve problems together, with greater cooperation and less confrontation.

<sup>&</sup>lt;sup>7</sup> A community that supports a volunteer site within its borders will receive a guaranteed 6% of gross operating receipts from the facility during each year of facility operation. This revenue is higher than the compensation mandated by Chapter 111H.

<sup>&</sup>lt;sup>8</sup> However, withdrawal from the Volunteer Sites Program does not enable a community to exclude itself from consideration in any further technical screening conducted to identify two to five Candidate Sites.

# 3. Major Procedural Elements of the Volunteer Sites Program -- At a Glance

The <u>principal</u> components of the Volunteer Sites Program are shown in the accompanying flow diagram, which begins <u>following</u> the Statewide Mapping and Screening stage with its release of the <u>Statewide Mapping and Screening Report</u> and public meetings on that report. Section 4 of this program plan discusses the details of each element.

## A. Public information and Participation

- Management Board provides Information about radiation, LLRW characteristics, LLRW management, risks associated with improper management, the state's siting process, and specifics of the Volunteer Sites Program (i.e., compensation, community controls, etc.).
- Municipal leaders, environmental groups, and other citizens participate in dialogues about LLRW management and the Volunteer Sites Program.

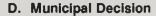
### **B.** Expression of Potential interest

- A landowner considering the possibility of volunteering a site submits an
   Expression of Potential interest Form containing information about the site and a
   certification that a copy of the form has been submitted to the municipality's
   Chief Executive Officer (CEO).
- When the Management Board receives an Expression of Potential Interest Form, it contacts the municipal CEO and offers to meet with local officials to discuss the community's participation in the Volunteer Sites Program.

## C. Municipal Deliberation

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- Public information and participation continues during period of municipality's review.
- Independent Review Grants are available to municipalities to assess facility Impacts.
- Municipality and Management Board discuss the provisions of a Volunteer Site Agreement (includes extra compensation for support of a volunteered site).



- Local approval of volunteered site and Volunteer Site Agreement by community-wide referendum.
- If favorable, Management Board and community execute Volunteer Site Agreement.

# E. Volunteer Sites Considered in "Possible Locations" Stage of Technical Screening

- After Volunteer Sites Program, Management Board continues its technical screening activities to identify Possible Locations that may contain one or more Candidate Sites.
- Management Board identifies additional locations that may contain Candidate Sites, in the event that an insufficient number of sites are volunteered, or they are determined to be unacceptable.

### F. Volunteer Sites May Become Candidate Sites

 Management Board evaluates volunteer sites using DEP site selection criteria to determine their adequacy for consideration in the next stage of technical screening, the Candidate Site identification stage.

#### G. Management Board May Select Superior Site

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- Conduct detailed site characterization over four seasons for each Candidate Site.
- Evaluate site's ability to meet federal and state licensing requirements.
- Identify environmental impacts.
- Management Board votes to accept, amend, or reject report on detailed site characterization; may select a volunteered site as a Superior Site.
- Volunteer Site Agreement takes effect, if volunteered site is selected as the Superior Site, and when the site is licensed and becomes operational.

# 4. Details of the Volunteer Sites Program

### A. Public Information and Participation

This is the first step in the Volunteer Sites Program. It consists of two major components, namely providing educational information to the public and encouraging public participation in the siting process.

Providing information about the use of radioactive materials, the nature and characteristics of LLRW; current and developing technologies pertaining to LLRW packaging, storage, treatment, transportation, and disposal that is analogous to very, very long-term storage; and the hazards associated with the improper management of LLRW are all responsibilities of the Management Board. Information will be disseminated through print and broadcast media (i.e., newspaper, radio and television coverage, advertising, etc.) through direct mailings (letters, brochures, reports, etc.), and through discussions and debates at various public meetings.

The public's opportunity to share in the LLRW management process is a key element in the state's LLRW management law. A "Public Participation Coordinator" -- a statutorily required staff position for the Management Board -- is responsible to "encourage and facilitate the participation of interested persons in all of the processes established in or pursuant to" the law. Public participation should ensure that the community values and concerns, of people most directly affected by LLRW-related land use decisions, are heard and addressed.

Public information and public participation will continue throughout the Volunteer Sites Program (as well as the entire siting process), and will be especially significant in communities where Expressions of Potential Interest Forms have been submitted to the Management Board and to local Chief Executive Officers.

# Steps in the Volunteer Sites Process

- Announcements about Volunteer Sites
   Program are made to municipal officials and the public with notice of beginning of Statewide Mapping and Screening activities.
- The Management Board will provide for public information and public participation (i.e., written materials, meetings, and public discussions about LLRW, its management, and the Volunteer Sites Program, etc.) during Statewide Mapping and Screening. This technical screening stage will use DEP exclusionary siting criteria to exclude some areas, and to allow further consideration of other areas, in the facility siting process.
- Upon completion of public meetings to discuss the <u>Statewide Mapping and Screening Report</u>, the Management Board will escalate its activities to provide information to the public, and to promote public participation by encouraging expressions of potential interest in volunteering sites.

# **B.** Expression of Potential Interest

The Volunteer Sites Program will begin after completion of Statewide Mapping and Screening, which is the first of three technical screening stages required by M.G.L. c.111H. This stage involves the use of data compiled in the Massachusetts Geographic Information System (MassGIS) consistent with the exclusionary criteria in the Department of Environmental Protection's (DEP) environmental screening criteria regulations, 310 CMR 43.00, to exclude portions of the state from further consideration as disposal facility sites, and to identify areas that will continue to be evaluated. [See Attachment A for a summary of DEP's exclusionary siting criteria regulations.]

After the <u>Statewide Mapping and Screening Report</u> Is discussed at public meetings around the Commonwealth, the Management Board will increase its activities to provide information about the Volunteer

Sites Program, and to encourage potential volunteers to submit Expression of Potential Interest Forms to the Board. [See Attachment B] The form means that there is "potential" Interest In volunteering a facility site and allows for the <u>exploration</u> of possibly volunteering; it does <u>not</u> commit to a siting decision. It also does not exclude a site identified through the technical screening method.

The Management Board will <u>not</u> accept any Expressions of Potential Interest Forms until <u>after</u> the release of the <u>Statewide Mapping and Screening Report</u>, and <u>after</u> public meetings are conducted on this report. The goal is to assure that the results of Statewide Mapping and Screening are not altered to match some site that was earlier volunteered.

The Expression of Potential Interest Form is completed by any individual having an ownership interest in the property to be volunteered. The form requires information about the volunteered site, the municipality and county (or municipalities and counties) where the property is located, the size of the site, its current use, site features (such as woodlands, fields, wetlands, ponds, etc.) and accessibility.

# Steps in the Volunteer Sites Process

- Management Board public Information and public participation programs will continue during the period of interaction between the Board, land owners potentially interested in volunteering sites and municipalities.
- Property owners considering the possibility of volunteering sites submit Expression of Potential Interest Forms to the Management Board. Such forms will contain a certification that community CEOs have received notice of the potential interest in volunteering a site.

The form also requires a certification from the submitter that he holds right, title, or interest to the volunteer site property, and that he has submitted a complete copy of the form to the office of the Chief Executive Officer (CEO) of the community (or communities) where the volunteer site is located. The submission to the municipal CEO is important, as this volunteer siting process cannot result in a volunteered site <u>unless</u> there is support within the community. That support does not have to be evident from the moment an Expression of Potential Interest Form Is filed. However, it must exist for the landowner's volunteered site to be supported in a local referendum.

When an Expression of Potential Interest Form is received by the Management Board, the Board will contact the CEO of the potential volunteer site community (or communities, if the site is located in more than one) to offer to meet, at the earliest convenience, with municipal officials for a discussion of community participation in the Volunteer Sites Program.

The Expression of Potential Interest Form is the first signal to the Management Board, municipal officials, and residents of that municipality of official interest by any landowner in potentially volunteering a site. Upon receiving notification of a property owner's interest in volunteering his land, the municipality can choose to learn more about LLRW, its management, and the responsibilities and benefits of hosting a disposal facility that is akin to very, very long-term storage of LLRW <u>prior</u> to making a final decision to proceed as a volunteer site community. This action will stimulate discussion, debate, and a thoughtful investigation of "site community" issues in an atmosphere of <u>noncommitment</u>.

#### C. Municipal Deliberation

The initial reaction of the community to the news of a submitted Expression of Potential Interest Form may be one of apprehension and unfamiliarity, since information about the use of radioactive materials and the management of LLRW generated as by-products of that use may not be general knowledge.

This third major step In the Volunteer Sites Program, therefore, will give municipalities from which

Expression of Potential Interest Forms have been submitted the time and resources to carefully evaluate the many issues involving LLRW and the facility siting process. Like the Expression of Potential Interest stage, the Municipal Deliberation step will enable the community to weigh what its role may be in LLRW management in an atmosphere of noncommitment to a potential volunteered site.

The Management Board will ensure that public Information and public participation continue throughout this deliberative stage. Meetings will be held in the potential volunteer site community and surrounding communities, to discuss aspects of LLRW. Written and video materials, as well as three-dimensional facility models, will be available to aid the public in its evaluation of LLRW management issues and the Volunteer Sites Program.

#### Independent Review Grants Available

In addition, if municipal officials of a potential volunteer site community Indicate their interest in assessing the Impacts of an LLRW facility within their community, the Management Board may make available to the municipal government grants of up to \$50,000. These funds will enable the community to conduct an <a href="independent">independent</a> review of the advantages and disadvantages of hosting an LLRW facility during the time when no final commitment has been made.

#### Volunteer Site Agreement

Another aspect of this period of **Municipal Deliberation** involves discussions between the Management Board and municipal officials about the provisions of a proposed Volunteer Site Agreement. Such a contractual agreement would be effectuated only if:

- Approval to volunteer a site were received locally at the next stage of this process, the Municipal Decision stage.
- The site were to perform effectively in the comprehensive environmental review conducted during detailed site characterization as a Candidate Site.
- The site were selected as the Superior Site.
- The facility is licensed and begins operations.

The Volunteer Site Agreement will include guarantees of financial compensation to the site community as well as obligations and privileges of the community and the Management Board, over those

# Steps in the Volunteer Sites Process

- 6. Distribution of grants to mun. palities in which a potential site has been identified through an Expression of Potential Interest Form, and municipal officials have indicated their interest in evaluating the impacts of a facility within the municipality's borders. Grants will enable communities to conduct independent reviews of facility impacts.
- Continuation of time for Interaction between the Management Board, persons potentially interested in volunteering sites and communities.
- Discussions about community compensation and impact payments; schedules and procedures for making decisions to remain in the volunteer program, or to opt out.
- Public meetings in communities where an expression of potential interest has been made, to provide information and to ensure public participation.
- 10. Negotiation of a Volunteer Site Agreement identifying compensation and impact payments that the municipality would receive, pending other actions resulting in the site's selection as a Superior Site, and facility operation.

of the alternate selection method using technical screening.<sup>9</sup> The guaranteed compensation provision available only through the Volunteer Site Program, which exceeds the level of compensation pledged in Chapter 111H, is:

• 6% of gross operating revenues from the facility to the local community for every year of facility operation, which is expected to last for 30 years or more. 10

The Volunteer Site Agreement also will include references to certain other compensation and impact payments, and negotiated provisions, both which are authorized by language in Chapter 111H,<sup>11</sup> and are therefore given to all site communities selected through the alternative site selection method of technical screening. These statutory compensation and impact payments include:

- \$150,000 to the local community for each year the facility operates, but ending five years after the facility license was issued. [Chapter 111H, section 33(a)(4)]
- Comprehensive environmental monitoring at the facility site with participation of officials and citizens of the site community. [Chapter 111H, section 36(a)]
- The community's extensive involvement in detailed site characterization, the four-season environmental investigation conducted to demonstrate whether the site complles with site selection criteria and is capable of being Ilcensed. [Chapter 111H, section 23]
- The community's authority to choose a facility operator. [Chapter 111H, section 21(c)(3)]
- The community's authority to choose the facility technology. [Chapter 111H, section 21(c)(3)]
- Technical assistance to the community to hire administrative and clerical personnel, and to retain consultants for advice on technical matters. [Chapter 111H, section 21(d)]
- Property tax payments on the facility site to offset fiscal losses from state land removed from the local tax roll, beginning from the time a facility license is issued through all the years of facility development, operation, closure, post-closure observation and maintenance, and institutional control. [Chapter 111H, section 33(a)(3)]
- The availability of insurance and trust funds for any liability claims and facility closure. [Chapter 111H, section 33(a)(6)]

<sup>&</sup>lt;sup>9</sup> The agreement will preserve the right of the Management Board to select an alternative site as the Superior Site, despite a community-wide referendum vote in support of a volunteer site and a Volunteer Site Agreement.

These payments are derived from the concept of percentage payments to 'he site community authorized by section 33(a)(4) of Chapter 111H. That section provides that the site community shall receive annually from the facility operator, a sum equal to 4% of gross operating receipts (or 5% of gross operating receipts if no "neighboring communities" exist to receive their statutorily authorized 1% of such receipts). Chapter 111H also provides that the annual gross-operating-receipt payments shall not be less than \$240,000 and \$400,000 (depending upon the volume of LLRW accepted annually at the facility).

These statutory provisions would be included in the Comprehensive Operating Contract negotiated between the Management Board and the facility operator, with consultation from the site community. They also will be referenced in the Volunteer Site Agreement.

• Local representation on the Management Board. [Chapter 111H, section 2(b)]

In addition, the Volunteer Site Agreement also will include references to provisions adopted by regulation of the Management Board and the Department of Public Heaith:

- Baseline health study of the site community and any affected community.<sup>12</sup> [105 CMR 120.831]
- Property value guarantees. [345 CMR 1.89]

In addition, the municipality may wish to negotiate further conditions for inclusion in the Volunteer Site Agreement. Examples of negotiated Issues, which are authorized by Chapter 111H, Include:

- Infrastructure improvements to roads, intersections, etc.
- Guarantees that a facility operator would be required to hire local residents, or purchase goods and services locally.

Funding to ensure that the site community receives all provisions of its Volunteer Site Agreement will be guaranteed through an assessment of fees on LLRW generators using the facility. Financing these provisions will <u>not</u> be dependent upon appropriation or other action by the Massachusetts Legislature.

#### D. Municipal Decision

The next stage of the Volunteer Sites Program is pivotal, as it provides for local approval of volunteering a site.

After the community has completed its review of LLRW management issues, and has conducted an independent evaluation of the advantages and disadvantages of hosting a facility, it will move to the decision-making stage of the Volunteer Sites Program.

A community-wide referendum will be conducted on both the volunteer site location and the Volunteer Site Agreement. The local vote will be taken during a state election if one Is scheduled to occur during the Municipal Decision period. If not, the community may select another local general election, such as the one to elect municipal officials, if approved by the Management Board. With prior approval of the costs,

# Steps in the Volunteer Sites Process

11. Local approval or rejection of volunteered site and Volunteer Site Agreement by community-wide referendum. If vote is for rejection, Management Board considers other volunteered sites; It can continue the Chapter 111H technical screening process to evaluate all lands not excluded in Statewide Mapping and Screening; it may evaluate other siting procedures.

the Board will finance any additional municipal costs to conduct this election that would not normally be incurred by the municipality.

If the majority of voters support volunteering the site and executing the Volunteer Site Agreement, the agreement will be signed by the Management Board and municipal officials. If the majority of voters

<sup>&</sup>lt;sup>12</sup> An "affected community" is one, other than a site community, which is identified in an Environmental Impact Report prepared pursuant to Chapter 111H, and can be expected to experience significant impacts as a result of the location, development, operation, closure, post-closure observation and maintenance or institutional control of a facility.

reject the volunteer site and the Volunteer Site Agreement, the Management Board has several avenues to pursue to continue its responsibility to identify two to five Candidate Sites and one Superior Site. The Board will continue working with other potential volunteer communities; it will continue the technical screening stages required by Chapter 111H to evaluate all lands that were not excluded during the Mapping and Screening stage. <sup>13</sup>

# E. Volunteer Sites Considered in "Possible Locations" Stage of Technical Screening

As noted in the previous section, a condition in any Volunteer Site Agreement gives the Management Board the right to select an alternative site as the Superior Site for an LLRW facility, despite local support for a volunteer site. The Board is obligated by Chapter 111H to conduct all stages of the technical screening process, even though it has suspended screening work between stages "one" and "two" to implement the Volunteer Sites Program. In addition, the Board is required to select a Superior Site following an evaluation of the results of detailed site characterization of two to five Candidate Sites.

Therefore, the Board will continue its technical screening efforts following the Volunteer Sites Program, which is estimated to last two years. At this point, the Possible Locations screening stage will be initiated to:

- Evaluate volunteer sites with respect to DEP site selection criteria to determine whether or not they should be considered for the next stage, the Candidate Site identification stage; and
- Identify additional locations that are likely to contain Candidate Sites, in the event that an insufficient number of sites are volunteered, or they are found to be unsuitable from Investigations conducted during this step.

# Steps in the Volunteer Sites Process

 If local referendum vote is for approval, Management Board evaluates volunteer site through Possible Locations technical screening stage.

#### F. Volunteer Sites May Become Candidate Sites

Volunteer sites remaining after Possible Location evaluations will continue under consideration in the next step of technical screening, the Candidate Site identification step. Volunteer sites may be selected as Candidate Sites only if they meet Management Board preference criteria 15 as well as DEP site selection

<sup>&</sup>lt;sup>13</sup> The two additional technical screening stages that follow Statewide Mapping and Screening are (1) identifying Possible Locations which are likely to contain one or more Candidate Sites, and then (2) identifying two to five Candidate Sites to undergo detailed site characterization.

Stage "one" of the Chapter 111H technical screening is the Mapping and Screening stage. Stage "two" of technical screening is the Possible Locations stage. Stage "three" is the Candidate Sites stage.

<sup>&</sup>lt;sup>15</sup> "Preference" criteria are those listed in DEP site selection regulations, as well as additional preferential criteria applied by the Management Board. A site exhibiting a greater degree of a preferred characteristic is more advantageous in that respect as compared to a site exhibiting less of that characteristic.

criteria. The Board will identify two to five Candidate Sites which will undergo detailed site characterization. "Detailed site characterization" is the on-site investigatory and analytical step of site selection which involves investigations and tests, both in the field and in the laboratory. These tests are designed to:

- Demonstrate whether the site complies with DEP site selection criteria.
- Provide information necessary for facility licensing and design.
- Provide information necessary to establish data collection points and baseline data for use in the environmental monitoring program and baseline health study.
- Identify potential environmental impacts resulting from the development, operation, closure, post-closure observation and maintenance, or institutional control of a facility at the site, for inclusion in an environmental Impact report.

### G. Management Board May Select Superior Site

Following the year-long detailed site characterization, which was conducted using a <u>Detailed Site Characterization Plan</u> developed by the Management Board and the community, <sup>16</sup> the Management Board will issue a <u>Draft Detailed Site Characterization Report</u> on the Candidate Sites for public review and comment at public meetings.

After that public review, the Management Board will vote to accept, amend, or reject the <u>Draft Detailed Site Characterization Report</u>. Depending upon its action on the draft report, the Board may vote by two-thirds of its members to select a Superior Site for the facility. Or, the Board may vote to repeat the siting procedures.

# Steps in the Volunteer Sites Process

- If local referendum vote is for approval, Management Board evaluates volunteer site through Candidate Site identification stage.
- 14. Management Board issues <u>Draft</u>
  <u>Candidate Site Identification Report</u>
  identifying the most promising sites
  from those volunteered and those
  identified (if necessary) from the
  technical screening procedures.
  Public hearings are held.
- 15. Community Supervisory Committees will organize and begin their work with the Management Board to develop a <u>Detailed Site Characterization Plan</u> for each Candidate Site. Public hearings are held.
- Detailed site characterization will be conducted over four seasons on all Candidate Sites.
- 17. <u>Draft Detailed Site CharacterIzation</u>
  Report on all Candidate Sites will be issued for public review and comment.
- Management Board votes to accept, amend, or reject the <u>Draft Detailed</u> <u>Site Characterization Report</u>, and may vote to select a Superior Site from a locally approved volunteered site.

Depending upon the evaluation of data collected on any Candidate Site that was a volunteer site, and the weight assigned to preferential criteria, a volunteer site may be selected by the Board as a Superior Site.

Once a potential site is identified as a Candidate Site, the municipality will appoint a local Community Supervisory Committee (CSC) to represent the community's interests during detailed site characterization. The CSC will represent the community's Interests In the environmental review and facility licensing activities, and will receive technical assistance and planning funds to perform its duties. If the site is ultimately selected as the Superior Site, the Superior Site CSC will choose a facility operator and the technology to be employed at the facility, and the municipality will be represented on the Management Board.

#### Attachment A

# Massachusetts LLRW Facility Siting Process . Summary of Department of Environmental Protection (DEP) Exclusion Criteria

- Exclude sites not capable of being adequately modeled, characterized, analyzed, and monitored with respect to hydrogeology, geologic features, and ground water flow characteristics as reasonably necessary to demonstrate compliance with Department of Public Health (DPH) performance objectives and those provisions of applicable state and federal regulations governing environmental monitoring.
- 2. Exclude sites located within the Zone III of an existing public water supply with a maximum approved pump rate of 100,000 gallons per day (gpd) or more.
- Exclude sites within the Zone II of an existing public water supply.
- 4. Exclude sites located over a potential productive aquifer (PPA) which has been determined by DEP to be qualified for development as a public drinking water system prior to the issuance of the <u>Draft Candidate Site Identification Report</u>. Notwithstanding this exclusion, a site may be located within a PPA qualified for development where the site is proposed to be outside of the Zone II of any system and outside of the Zone III for systems pumping 100,000 gpd or more.
- 5. Exclude sites located within the Zone of Contribution of an existing private groundwater source or non-community system unless the source/system is located on the parcel of land that is designated to be acquired pursuant to M.G.L. c. 111H, s. 23(g) and the source/system is secured from any use other than uses related to the construction, operation, or environmental monitoring of the facility.
- 6. Exclude sites located within the Zone of Contribution of a potential private groundwater source or non-community water system unless the source/system is located on the parcel of land to be acquired pursuant to M.G.L. c. 111H, s. 23(g) and Is secured from any use other than uses related to the construction, operation, or environmental monitoring of the facility.
- 7. Exclude sites which are located over the areal extent of a sole source aguifer.
- 8. Exclude sites where the minimum depth to the water table is insufficient to prevent the intrusion of groundwater, perennial or otherwise, into the waste.
- Exclude sites where the water table is below the bedrock surface and where between the bedrock and the bottom of the waste management unit there is less than a minimum total thickness of ten feet of (unsaturated) soil units (natural or placed) with a maximum saturated hydraulic conductivity of 1X10<sup>-4</sup> cm/sec.
- 10. Exclude sites where the average horizontal gradient in the uppermost aquifer underlying the site is more than 0.01.
- 11. Exclude any site where the probable waste management area would be located within the watershed of a Class A public surface drinking water supply as defined in 314 CMR 4.05(3)(a).
- 12. Exclude any site where the probable waste management area would be located within any of the following area of a Class B public surface drinking water supply as defined in 314 CMR 4.05(3)(b):

400 feet from the 100 year flood plain elevation extending 1/2 mile upgradient from the supply Intake and extending 200 feet downgradlent from the supply Intake or the physical spillway, whichever downgradlent distance is less.

- 13. Exclude any site in which the probable waste management area would be within any 100 year flood plain.
- 14. Exclude sites where the probable waste management area would be located within 100 feet of a resource area protected by the Wetlands Protection Act, M.G.L. c. 131, s. 40 and 310 CMR 10.00.
- 15. Exclude from the site any land that does not drain well and is subject to periodic flooding or frequent ponding.
- 16. Exclude from the site upland drainage areas which, due to their size, geometry, and surface characteristics, are unable by natural drainage patterns and normal engineering drainage controls to reliably channel the surface runoff expected from a statistical 100 year precipitation event without significantly eroding or inundating the probable waste management area.
- 17. Exclude sites In coastal high hazard zones.
- 18. Exclude sites in areas subject to inundation by the failure of an existing dam.
- 19. Exclude sites in which a hydrogeologic unit within the probable waste management area discharges groundwater to the surface within the site.
- 20. Exclude sites where tectonic processes in the vicinity, such as faulting, folding, seismic activity, or volcanism are reasonably likely to adversely affect the ability of the probable waste management area to meet DPH performance objectives or preclude adequate modeling and prediction of long term impacts.
- 21. Exclude sites where the probable waste management area would be located in the vicinity of surface geologic processes such as mass wasting, erosion, slumping, landsliding, which occur with such frequency and extent that such events would be reasonably likely to adversely affect the ability of the site to meet any DPH performance objectives or preclude adequate modeling and prediction of long term impacts.
- 22. Exclude sites where the probable waste management area would have an average slope greater than 20%.
- 23. Exclude sites where the existing population density, projected population growth, or future development in the vicinity of the site is reasonably likely to interfere with the ability of the facility to meet DPH performance objectives.
- 24. Exclude sites where the probable waste n anagement area would be located in proximity to sensitive population locations as a result of which:
  - a. It is reasonably likely that the site will not be able to meet the DPH performance objectives; or
  - b. The exposure to radiation or toxic materials, if mixed waste is to be accepted at the site, which a member of the affected sensitive population is reasonably likely to receive in the event of a release of radiation or hazardous waste from the site would result in a

significantly higher than normal risk of adverse effect on the health of the sensitive population.

- 25. Exclude sites that are insufficient in size to contain a waste management area, a buffer zone, and other facility components.
- 26. Exclude sites that are Insufficient in size to meet the minimum land areas determined by the Management Board to be required for suitable facilities.
- 27. Exclude sites that are not reasonably likely to meet DPH performance objectives based on a performance assessment that, at a minimum, incorporates the facility design standards of probable suitable technologies set forth in 105 CMR 120.815.
- 28. Exclude sites where the probable location of the waste management area in relation to nearby activities is reasonably likely to adversely affect the ability of the site to meet DPH performance objectives.
- 29. Exclude sites where the probable location of the waste management area in relation to nearby past or present activities is reasonably likely to significantly impair the environmental monitoring program including, without limitation, existing or past activities or natural sources that emit radioactivity or release non-radioactive material into the environment to the extent that it is reasonably likely to adversely affect the ability of the environmental monitoring program to detect or monitor the existence or magnitude of emissions or releases from the facility or the site.
- 30. Exclude sites located on prime agricultural land based on soil classification established by the U.S. Soil Conservation Services or on land designated as an agricultural incentive area pursuant to M.G.L. c. 40L, s. 1 et seq. on or before December 31, 1992.
- 31. Exclude sites to which the Commonwealth cannot obtain title.
- 32. Exclude sites located in any area of critical environmental concern designated pursuant to M.G.L. c. 21A, s. 2(7), St. 1974, c. 808, s. 401(e) and 301 CMR 11.15.
- 33. Exclude sites located in scenic and recreational rivers and streams of the Commonwealth designated pursuant to 302 CMR 3.00.
- 34. Exclude sites that are reasonably likely to adversely affect any national park, monument, lake shore, habitat of endangered species, or area protected by the Wilderness Act, 16 USC ss. 1131-1136, the Wild and Scenic Rivers Act, 16 USC ss. 1771-1287, and the Fish and Wildiffe Coordination Act, USC ss. 661-666c; or the National Historic Preservation Act, USC ss. 470-470m.

